A Study of the Relationship between Teachers' Participative Decision-Making and School Effectiveness in the Special School

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Abstract

A fundamental ideal of our democratic republic is that every person has some way through which she/he can participate in decisions which directly affect her/him. To some extent, most teachers are able to recognize this ideal in their private lives. It seems logical that this realization would also carry over and prevail in an individual's working life. This would also include the teaching profession and school administration. With few exceptions, teachers seemed to favor participation in decision-making (Yarborough, 1976). The extent of teacher involvement in decision-making and representation together were strongly related to the effectiveness of the units (Berlinger, 1975). Nowadays, the school effectiveness research has become one of the most dynamic areas of study in education. Schools are complex social systems in which different elements or characteristics combine in different ways and different combinations in various schools (Miller, 1994). Regular education reformers have not adequately addressed the issues of students with disabilities (Johnson & Rusch, 1993). The government will establish a special school in every county of Taiwan, ROC. When the number of special school increases, it is essential to understand whether there is a relationship between teachers' participative decision-making and school effectiveness.

Introduction

In most studies, teachers seemed to favor participation in decision-making. Many studies were found which specifically mentioned the term "school effectiveness" in relation to teacher participation in decision-making (George & Shewey, 1994; Daniel & Shay, 1995). A classification scheme for participation in organizational decision making has been devised by Alutto & Belasco (1972). Twelve decisional situations were identified: (1) hiring new faculty members; (2) selecting specific instructional texts; (3) resolving learning problems of individual students; (4) determining appropriate instructional methods and techniques; (5) establishing general instructional policies; (6) establishing classroom disciplinary policies; (7) planning

school budgets; (8) determining specific faculty assignments; (9) resolving faculty member grievances; (10) planning new buildings and facilities; (11) resolving problems with community groups; (12) determining faculty salaries.

Effectiveness has been defined as the "achievement of goals"(Robbins, 1996). It means the degree to which an organization realizes its goals. Bestor's(1953) book entitled, Educational Wasteland was an early example calling for the reform of secondary education and a it was a harbinger of events to come. Since then, and particularly during the 1980s, the number of reports calling for education reform increased dramatically. Toch (1991) traced the growth and status of the excellence in education movement during the 1980s. He cited more than 17 different reports focusing on education reform. Furthermore, most existing reports ignored young people with disabilities. Greer (1992) argued that the plan America 2000, "…proposes admirable goals but fails to apply them to all children", implying that again, students with disabilities were ignored by recommendations and plans for education reform.

No single ultimate criterion such as student achievement or overall performance can capture the complex nature of school effectiveness. A larger number of school effectiveness factors suggested by Edmond, Purkey and Smith, and Stedman are summarized in Table 1 (Hoy & Miskel, 1996).

Table 1. Three sets of factors in the effective-school formula

Edmonds	Smith and Purkey	Stedman
•Principal leadership	•Instructional leadership	•Pluralism
•Emphasis on basic skills	•Planned and purposeful curriculum	•Academically rich programs
•High expectations for student achievement	•Clear goals and high expectations	•Personal attention to students
•Frequent and systematic evaluation of students	•Time on task	•Student responsibility
•Orderly environment	•Recognition of academic success	•Supportive environment
	•Orderly climate	•Skilled use and training of teachers
	•Sense of community	•Teaching to prevent academic problems
	•Staff development	•Shared governance
	•Staff stability	•Parent participation
	•Collegial and collaborative planning	
	•School site management	
	•Parental support and involvement	
	•District support	

The Individuals with Disabilities Education Act Amendments of 1990 (P.L. 101-476) marks a new era of accountability in transition-related services. The intent of this mandate is to ensure that students with disabilities receive a coordinated education that results in desired post-school outcomes, including the likelihood of post-secondary education and training, probable employment, and independent living. The promise for the future is the emergence of an educational system that will result in benefits for all students with disabilities after leaving school. The Heritage Foundation (1984) and the NCAS (1985) identified four concerns in the field of

special education: (1) the proliferation of students inappropriately classified and placed in classes for students with learning disabilities and mild mental retardation; (2) costs of education students with disabilities at the expense of nondisabled students; (3) opening of school records to parents; (4) the involvement of the federal government to ensure that all students with disabilities receive a free and appropriate public education. Sapon-Sevin (1987) identified several concerns about the way in which special education issues were omitted by the national reports. Finally, numerous questions have been raised by special educators about the efficacy of separate special education assessment, classification, class placement, instructional procedures and minority overrepresentation.

In this study, the teachers' participative decision-making included six dimensions: (1) academic affairs; (2) student affairs; (3) student guidance and counseling; (4) general affairs; (5) faculty personnel; (6) other affairs. The school effectiveness included eight dimensions: (1) principal leadership; (2) parental participation and sense of community; (3) school climate and culture; (4) school environment, new buildings, and facilities; (5) instruction and evaluation of students (6) administrative support; (7) curriculum; (8) teacher job satisfaction.

Purpose of the Study

The extent to which teachers were actually involved and wished to be involved in the decision making was examined (Alutto & Belasco, 1972). The difference between the teachers' perceived actual and desired levels of involvement was determined; resulting in a decisions on conditions of deprivation, equilibrium, or saturation which were then related to school effectiveness. The purposes of this study are:

1. To analyze the difference in teachers' participative decision-making (desired and actual) of different teacher biographical variables.
2. To analyze the difference in teachers' participative decision-making (desired and actual) of different teacher job background variables.
3. To analyze the difference in school effectiveness of various teachers' biographical variables.
4. To analyze the difference in school effectiveness of various teachers' job background variables
5. To analyze the differences of three conditions of decision in participative decision-making (actual and desired) and school effectiveness.
6. To explore the relationship between the teachers' participative decision-making (actual and desired) and school effectiveness.
7. To explore which variables can predict the teachers' participative decision-making and school effectiveness.

8.To explore the predictiveness of biographical and job background variables in school effectiveness.
9.To explore the predictiveness of teachers' participative decision-making in school effectiveness.

Methods and Procedures

The study was divided into two parts. The first part reviewed the participative decision-making and school effectiveness. The second part surveyed teacher of special schools in Taiwan, R.O.C. The pretest was carried out in December 1999 to survey 100 special school teachers. The data of the questionnaire were then analyzed statistically with SPSS 8.0 for Windows, assessing reliability, validity, item analysis and factor analysis.

The teachers' participative decision-making questionnaire included six dimensions: (1) academic affairs; (2) student affairs; (3) student guidance and counseling; (4) general affairs; (5) faculty personnel; (6) other affairs. The reliabilities were between .72 and .89; the whole reliability of the questionnaire was .96. The school effectiveness questionnaire included eight dimensions: (1) principal leadership; (2) parent participation and sense of community; (3) school climate and culture; (4) school environment, new buildings, and facilities; (5) teaching and evaluation of students (6) administrative support; (7) curriculum; (8) teachers' job satisfaction. The reliabilities were between .75 and .94; the whole reliability of the questionnaire was .96. The item analysis included two parts: (1) the Pearson product-moment correlation coefficient; (2) critical ratio. In the teacher decision-making and school effectiveness questionnaire, items with over the Pearson product-moment correlation coefficient over .5 and critical ratio over 5 were maintained.

Factor analysis analyzes the intercorrelation among a large set of measures in order to identify a smaller number of common factors. The study analyzed the responses of 100 subjects to the 28 items in the teachers' participative decision-making questionnaire and extracted six factors that were being measured by the 30 items. The analysis is shown in Table 2. The study analyzed the responses of 100 subjects to the 40 items in the school effectiveness questionnaire and extracted eight factors that were being measured by the 40 items. The analysis is shown in Table 3. In the factor analysis, the varimax was used. The factor loading was over .4 and the eigenvalue was over 1.

After the review of literature and analysis of pretest data, a questionnaire was constructed in this study to survey 350 special school teachers by using stratified random sampling in March 1999. The effective sampling is 291. The data was analyzed statistically. The statistical methods used were T-test, Pearson product-moment correlation, one-way ANOVA and multiple regression.

Table 2. Factor analysis of teacher' decision-making

Factor	Item number	Factor loading	Eigenvalue	Cumulative variance
Student affairs	4	.764	13.26	47.4%
	5	.673		
	17	.606		
	2	.586		
	7	.571		
	3	.541		
	1	.527		
	8	.468		
Student guidance and counseling	10	.778	1.802	53.8%
	11	.700		
	12	.642		
	9	.548		
	18	.457		
Academic affairs	13	.834	1.413	58.8%
	14	.769		
	15	.762		
	16	.461		
	6	.436		
Other affairs	20	.760	1.345	63.6%
	19	.754		
	23	.732		
General affairs	22	.655	1.166	67.8%
	21	.611		
	25	.582		
	24	.561		
Faculty personnel	28	.769	1.019	71.4%
	26	.642		
	27	.585		

Table 3. Factor analysis of School effectiveness

Factor	Item number	Factor loading	Eigenvalue	Cumulative variance
Principal leadership	1	.914	17.073	42.7%
	2	.894		
	3	.870		
	4	.847		
	5	.799		
	6	.613		
Parental participation and sense of community	32	.820	3.974	52.6%
	12	.742		
	9	.691		
	11	.685		
	10	.644		
	27	.608		
	36	.539		
	31	.497		
School climate and culture	13	.812	2.159	58.0%
	14	.736		
	15	.724		
	16	.685		
	17	.539		
School environment new buildings and facilities	21	.719	1.892	62.7%
	40	.703		
	20	.692		
	18	.653		
	22	.627		
	23	.613		
	38	562		
	39	.561		
	18	.545		
Instruction and evaluation of students	37	.634	1.704	67.0%
	7	.619		
	26	.597		
	24	.506		
Administrative support	30	.775	1.244	70.1%
	29	.598		
	8	.462		
Curriculum	33	.759	1.052	72.7%
	34	.603		
	35	.575		
Teacher job satisfaction	25	.637	1.018	75.3%
	28	-.448		

Results

According to the data analysis of the questionnaire and the related literature review, the several generalizations were reached in this study.

1. There was a significant difference of the biographical variable (gender) on teachers' actual participative decision-making.
2. There were significant differences of some job background variables (school history, job position, and department of special education) on teachers' actual and desired participative decision-making.
3. There was a significant difference of the biographical variable (gender) on school effectiveness.
4. There were significant differences of some job background variables (job position, school history) on school effectiveness.

5.There were significant differences for each decisional situation on teachers' participative decision-making.

6.There was a significant relationship between teachers' participative decision-making(actual and desired) and school effectiveness.

7.There were some biographical variables and job background variables that successfully predicted the teachers' participative decision-making and school effectiveness.

8.Teachers' participative decision-making successfully predicted the school effectiveness.

9. The decision condition that special school teachers most favored was equilibrium (38.8 %).

The significant differences of biographical variables and job background variables on teachers' participative decision-making and school effectiveness were listed in Table 4

Table 4. The significant difference table of variables

	background variables	Teachers' biographical variables					Teachers' job background variables				
	factor	Gender	Age	Graduation diploma	Special education background	Tenure	Job rank	Department of special education	Category of special school	School history	School location
$D^{\leftarrow}$	Student affairs						**				
	Guidance and counseling										
	Academic affairs								**	***	
	Other affairs		**				***	**		***	
	General affairs	*		**	*		***			**	*
	Faculty personnel		**							**	
	Total score									***	
$A^{\uparrow}$	Student affairs						***				
	Guidance and counseling	*		**			***				
	Academic affairs						***	***		**	*
	Other affairs	*					***	***			
	General affairs	**		**			***	**			
	Faculty personnel	***					**				
	Total score	*					***	**			
$S^{\rightarrow}$	Principal leadership	*					**			***	
	Parental participation..									**	
	Climate and culture									**	*
	Environment, building..	*					*			**	
	Instruction & evaluation	*									
	Administrative support	**					***	*		***	**
	Curriculum	*					**			**	
	Teacher job satisfaction						**			**	
	Total score	*					**			***	

***p<.001, ** p<.01, *p<.05

Note. $D^{\leftarrow}$ represent the teachers' desired participative decision-making, $A^{\uparrow}$ represent the teachers' actual participative decision-making, $S^{\rightarrow}$ represent school effectiveness.

The Pearson product-moment correlation between the teachers' participative decision-making (desired and actual) and school effectiveness was shown in Table 5 and Table6.

Table 5. The Pearson product-moment correlation between participative decision-making (desired) and school effectiveness

school effectiveness / teachers' participative decision-making	Principal leadership	Parental participation and sense of community	School climate and culture	School environment buildings and facilities	Instruction and evaluation of students	Administrative support	Curriculum	Teachers' job satisfaction	Total score
Student affairs	.28***	.34***	.36***	.27***	.37***	.34***	.38***	.29***	.41***
Counseling, guidance	.24***	.28***	.30***	.21***	.28***	.26***	.35***	.28***	.34***
Academic affairs	.25***	.28***	.33***	.27***	.32***	.23***	.36***	.25***	.35***
Other affairs	.19***	.32***	.28***	.32***	.26***	.28***	.34***	.29***	.36***
General affairs	.12***	.15*	.11	.12*	.11	.13*	.18*	.11	.17**
Faculty personnel	.05	.17**	.21***	.16**	.26***	.05	.25***	.05	.18**
Total score	.25***	.33***	.35***	.28***	.34***	.28***	.39***	.27***	.39***

***p<.001, **p<.01, *p<.05

Table 6. The Pearson product-moment correlation between participative decision-making (actual) and school effectiveness

school effectiveness / teachers' participative decision-making	Principal leadership	Parental participation and sense of community	School climate and culture	School environment buildings and facilities	Instruction and evaluation of students	Administrative support	Curriculum	Teachers' job satisfaction	Total score
Student affairs	.18**	.21***	.30***	.24***	.30***	.30***	.28***	.23***	.32***
Counseling, guidance	.24***	.25***	.36***	.30***	.30***	.36***	.35***	.31***	.38***
Academic affairs	.09	.20**	.26***	.29***	.26***	.22***	.25***	.13*	.26***
Other affairs	.18**	.30***	.23***	.31***	.22***	.37***	.29***	.25***	.34***
General affairs	.16**	.25***	.19**	.23***	.14*	.31***	.28***	.21***	.28***
Faculty personnel	.16**	.20**	.19**	.18**	.15*	.23***	.22***	.20**	.24***
Total score	.21***	.28***	.32***	.32***	.30***	.36***	.35***	.27***	.38***

***p<.001, **p<.01, *p<.05

A summary of the multiple regression analysis for biographical and job background variables predicting the teachers' desired participative decision-making is shown in Table 7. A summary of the multiple regression analysis for biographical and job background variables predicting the teachers' actual participative decision-making is shown in Table 8. Summary of multiple regression analysis for biographical and job background variables predicting school effectiveness is shown in Table 9. A summary of the multiple regression analysis for the teachers' desired and actual participative decision-making predicting school effectiveness is shown in table 10.

Table 7 Summary of multiple regression analysis for biographical and job background variables predicting teachers' desired participative decision-making

Variable	R	R^2	B	β	F
School history	.1880	.0350	-2.558	-.191	10.62**
Job position	.2220	.0490	4.089	.145	7.43**
Background of special ed.	.2560	.0650	2.335	.134	6.69***
Gender	.2820	.0800	-4.843	-.121	6.20***

***p<.001, **p<.01

Table 8 Summary of multiple regression analysis for biographical and job background variables predicting teachers' actual participative decision-making

Variable	R	R^2	B	β	F
Job position	.3260	.1070	8.548	.282	34.47***
Depart of special education	.3570	.1270	4.120	.161	21.02***
Gender	.3850	.1490	-6.064	-.141	16.69***
Background of special ed.	.4020	.1620	-2.197	-.117	13.80***

***p<.001, **p<.01

Table 9 Summary of multiple regression analysis for biographical and job background variables predicting school effectiveness

Variable	R	R^2	B	β	F
School history	.1980	.0390	-4.329	-.286	11.79**
Gender	.2620	.0680	-7.986	-.177	10.58***
Age	.2970	.0880	3.528	.154	9.22***

***p<.001, **p<.01

Table 10 Summary of multiple regression analysis for teachers' desired and actual participative decision-making predicting school effectiveness

Variable	R	R^2	B	β	F
Desired participative	.3870	.1500	.295	.261	50.91***
Actual participative	.4420	.1950	.261	.247	34.87***

***p<.001

Implications and Suggestions

Based upon these findings and conclusions, this study proposed several implications and recommendations.

1. Offering seminars or discipline courses on participative decision-making to special school teachers is recommended.
2. Offering female teachers the opportunity to serve as school administrators is urged.
3. Education evaluation should include school effectiveness.
4. Special schools with a longer school history should encourage teachers to participate in decision-making.

5. Consider the actual participative decision-making of female teachers.
6. Offering teachers in the primary department of special schools the opportunity to participate in decision-making is recommended.
7. Offering teachers the opportunity to participate in decision-making according to their profession is also recommended.
8. Encourage special school teacher who does not pluralize administrator to participate in decision-making.
9. The school administrator should consider teachers' opinions when deciding important school affairs.
10. The principal should offer teachers the opportunity to be a administrator.
11. Offering young teachers the opportunity to participate in decision-making is recommended.
12. The principal of a special school should administer democratically.
13. Strengthening the relationship between the special school and community is urged.
14. Teachers should actually participate in decision-making to identify school effectiveness.
15. Female teachers should actively participate in decision-making more to identify school effectiveness.
16. Set up the characteristics of special school effectiveness.

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